

Statement of Linton F. Brooks

National Nuclear Security Administration

U. S. Department of Energy

Before the

Energy and Commerce Committee

United States House of Representatives

July 9, 2002

Introduction

Thank you, Mr. Chairman for having me here today. This is an important topic: the establishment of a new Government Agency that will have sweeping responsibilities. The new Department of Homeland Security will enable us to more effectively respond to today's threats, through a streamlined and dynamic institution that will greatly enhance our ability to respond quickly, decisively, and where necessary, before threats against our homeland materialize. We are on the verge of making history. It's critical that we get it right.

The Department of Energy and the National Nuclear Security Administration are fully committed to the homeland security mission, and the successful establishment of the Department of Homeland Security. We recognize that this will require restructuring and relocation of critical assets now under the stewardship of the NNSA. We are prepared to support these shifts in responsibilities, and indeed, to do what is necessary to make any transfer of responsibilities as smooth and painless as possible.

There is an enormous amount of experience and expertise now residing in DOE/NNSA that will be vital to the success of the new Department. Our Technology Research and Engineering assets have been applied to homeland security problems long before last September; since then, such contributions became even more focused and accelerated.

We've conducted the PROTECT subway demonstration, which will help provide chemical protection to the U.S. population. We deployed a prototype biodetection capability at the winter Olympics. We have greatly increased our work with the U.S. Customs and US Coast Guard with radiation and nuclear technology – specific technical support that will directly benefit the new Department. DOE/NNSA is committed to ensuring that its assets can continue to provide enabling science and technology to support homeland security and counter-terrorism mission needs.

There are a number of capabilities currently residing in the Department of Energy that will support or be transferred to the new Department. Today I want to focus on those relevant to Title III of the legislation – those germane to technology research and development in support of the Homeland Security mission.

Before beginning that discussion, let me briefly mention a few things that the Homeland Security Act does not do. It will not affect our ability to conduct our principal missions of stockpile stewardship, nuclear nonproliferation, naval nuclear propulsion, and, just coming to NNSA, emergency response. NNSA will retain all of its programs and responsibilities that contribute to our ability to assure the safety, security, and reliability of the nation's nuclear weapons stockpile.

With respect to nuclear nonproliferation, the Administration proposes to transfer the core of our chemical-biological WMD work and certain nuclear programs related to the domestic threat. This is largely self-contained work and primarily supports domestic preparedness programs.

NNSA has unique assets and capabilities, developed primarily from our work with nuclear weapons and with nonproliferation, that have been applied to homeland security problems long before last September.

Some of these initiatives have long timelines; Long before 9/11, DOE has led USG efforts to support “first responders” with our chemical, biological, and nuclear research programs. We’ve worked closely with the FBI and other agencies to ensure that cutting edge detection and identification technologies are available to those that would need them first. And we began this work long before there was a recognized need to do so – we took the initiative because we anticipated the requirement. It is as good an example as any of why long-range research is so critical to the security of this country.

We have aggressively pursued these efforts since last 9/11. But it's time for a more focused organization and we are committed to that change and to continuing to provide enabling science and technology in support of homeland security and counterterrorism mission needs.

Nonproliferation and Verification Research and Development

The NNSA Nonproliferation and Verification Research and Development Program conducts applied research, development, testing, and evaluation of technologies that lead to prototype demonstrations and resultant detection systems. As such, the program strengthens the U.S. response to current and projected threats to national security worldwide posed by the proliferation of nuclear, chemical, and biological weapons and the diversion of special nuclear material. The R&D program provides operational organizations with innovative

systems and technologies to satisfy their nonproliferation and counter-terrorism mission responsibilities. The program's three main elements are:

- Nuclear explosion monitoring, which will remain within the Department of Energy
- Chemical and Biological National Security, which will be transferred in its entirety to the Department of Homeland Security
- Proliferation Detection,

Proliferation Detection sponsors a high-risk research on detection technologies that can support both nonproliferation and homeland security. Those elements that can be disaggregated and identified as supporting homeland security will be transferred to the new Department. At a minimum, we will transfer our research and development to counter nuclear smuggling. Where the activity supports both the homeland security and non-proliferation functions, we will examine arrangements as joint programs. The Administration's proposed legislation gives the President the necessary flexibility to provide for joint operation.

Let me describe those functions that will be transferred, after which I will return to the subject of long-term coordination.

Major Activities Identified for Transfer

Within, the Nonproliferation and Verification Research and Development Program, the Chemical and Biological National Security Program and the nuclear smuggling detection activity fall squarely into the Homeland Security mission and thus have been designated for transfer in their entirety.

Chemical and Biological National Security Program

The Chemical and Biological National Security Program works to develop technologies and systems to improve the U.S. capability to prepare for and respond to domestic chemical and biological threats against civilian populations, complementing DOD's focus on the battlefield and military installations. As part of its primary nuclear science and technology mission, NNSA and the National Laboratories have developed extensive capabilities in chemistry, biology, and materials and engineering sciences that form the basis for the NNSA chemical and biological national security program. We have conducted research on the biological foundations necessary to establish signatures of biological threat agents and develop assays certified by the Centers for Disease Control for those agents, which are applied to develop detectors.

NNSA has conducted demonstration projects of prototype detector capabilities in partnership with other agencies to support their operational missions, such as the systems I just mentioned that have been developed and applied for the Olympics and the Washington Metro, to illustrate possible system approaches for population protection. We are now working to expand the number of signatures and assays of biological agents that we can detect with increased sensitivity, and to improve public health response through the CDC. The next generation of bio-detectors will detect a much wider range of agents, which will enable public health agencies to more rapidly treat affected people.

Homeland Security Nuclear Smuggling Activities

The nuclear smuggling component of our proliferation detection program also squarely fits within homeland security and will be transferred. NNSA and the National Laboratories have unique insight into nuclear proliferation activities — the facilities and infrastructure, as well as the observable signatures of nuclear weapon development activity. We also have the capability to develop technical solutions for the U.S. government to detect and characterize such proliferation activities in their early stages. NNSA has worked closely with homeland security agencies, including U.S. Customs, U.S. Coast Guard, and the Departments of Transportation and Justice to apply this technical base to detection of nuclear weapons and materials at U.S. borders. With these agencies, we have previously conducted demonstrations of radiation detection methods at international border crossings, including a port, a rail yard, and airport personnel and baggage handling facilities. With many of these agencies becoming part of the new Department, it is a good fit for the R&D applications to counter nuclear smuggling to be transferred to the Department of Homeland Security.

Nuclear Threat Assessment and Trafficking in Nuclear Materials

In addition to the transfer of research and development, Title III of the proposed legislation provides for the transfer of the Department of Energy's Nuclear Assessment Program to the new Department of Homeland Security. This program provides a national capability to assess accurately and swiftly the credibility of communicated threats of nuclear terrorism. The Lawrence Livermore National Laboratory (LLNL) leads this unique effort. Since September 1978, the Nuclear Assessment Program has been used to assess the credibility of over 60 nuclear extortion threats, 25 nuclear reactor threats, 20 non-nuclear extortion threats and approximately 650 cases involving the reported or attempted illicit sale of nuclear materials.

When activated, DOE-based threat credibility assessment teams perform comprehensive technical, operational and behavioral assessments of communicated nuclear threats at the start of an actual or perceived emergency. Since communicated nuclear threats are a serious violation of federal law, the FBI is the lead federal agency. Since the Program's inception in 1977, the

Nuclear Assessment Program has developed close and working relationships with its counter-terrorism counterparts in Customs, State, FBI, DIA, CIA, and others in the nonproliferation community. The Program also provides expert technical support to law enforcement and others for Special Event Preparedness, on-scene technical support, and national and international training.

Since 9/11 the Nuclear Assessment Program has performed approximately 70 assessments involving communicated nuclear threats, reports of illicit trafficking of nuclear materials, and special analysis reports for law enforcement and intelligence components. This national asset provided immeasurable support to all government agencies tasked with separating critical from non-critical information in the aftermath of 9/11.

Observations

With the transfer of these programmatic responsibilities to the Department of Homeland Security, it will be critically important that the new Department assume the leadership to maintain the technical base at the National Laboratories. Upon this foundation is built our future technical capability. The multidisciplinary scientific environment of a national laboratory is ideally suited to pursue high risk, long-term research, in spite of the need to focus on short-term requirements for homeland security. It is the ability to pursue such research that makes our national laboratories a national treasure – and a unique asset with unmatched capabilities. Only through such investment will the scientific and technical capability exist to meet the needs for innovative solutions to future homeland security problems.

With respect to the remainder of the proliferation detection program, no matter how the responsibilities are finally apportioned, the research will be of value to both departments. For that reason, it is critical that we work together closely. By so doing, our nonproliferation and homeland security efforts will continue to benefit from the unparalleled capabilities of the National Laboratories.

I support fully the concept of locating the new Department's main research facility at Lawrence Livermore, with satellite centers of excellence located at other national laboratories. It will create a campus-like environment where scientists will be dedicated, full-time, to thinking about homeland security, and it will allow for direct interaction with the expertise that resides at the other DOE labs as well as other labs throughout the federal government. It's good for DOE and it's good for the Department of Homeland Security.

Conclusion

I want to reiterate in no uncertain terms: The National Nuclear Security Administration supports fully the transfer of the programs noted in Section 302(2) of the bill under discussion. The details of what would be included in the legislative package were worked out directly with my office. These programs are a natural fit for the Department of Homeland Security, whose primary mission is the critical task of protecting the United States from catastrophic terrorism. DOE/NNSA will also work to ensure that its assets can continue to contribute enabling science and technology in support of DHS mission needs.

Obviously, that is a goal that I am pleased to support wholeheartedly. I believe that the Administration's proposed legislation represents a major step toward its realization.

Thank you, and I look forward to any questions you may have.